

GYMNALEURODES, A NEW GENUS OF ALEYRODIDÆ
FROM CALIFORNIA

(Homoptera)

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*University of California, Berkeley***Gymnaleurodes Sampson and Drews, new genus**

Pupal case elliptical to subovate in outline; margin of the case crenulate, the submarginal area not separated from the rest of the body. Several rows of tooth-like structures found behind the margin, the outer twice as long as the inner. Dorsum without papillæ or pores. Vasiform orifice cordate; the operculum transversely elliptical, filling about one-half of the orifice. Lingula spatulate, with distal extremity exposed beyond operculum, lobed and without spines. No caudal furrow present. Marginal fringe consisting of numerous glass-like rods. Abdominal spines not over four.

Genotype: *Gymnaleurodes bellissima*, new species.

This genus differs from *Aleyrodes*, in that the margin of the pupal case is not crenulated in the same manner, the operculum is not of the same shape; also the shape and spination of the lingula differ. In addition this genus is somewhat like *Trialeurodes*, except that there is no elevation of the case. There are no pores or papillæ, no caudal furrow, and no notch at the posterior edge. There is some resemblance to *Pealius*, but the operculum is not of the same size and shape; there is no caudal furrow, the vasiform orifice and lingula are not of the same form.

Gymnaleurodes bellissima Sampson and Drews, new species

Pupal case. Case laterally constricted cephalically, with a slight inward indentation at caudal end. Color of case a dirty yellow, with some pale reddish-brown markings on dorsum; color much more clear and striking in live specimens. Specimens parasitized by fungi slightly darker in appearance. No indication of wax on dorsum. Dorsum imbricated, particularly toward the edge, irregularly toward the top, more regularly toward the edge. Cephalothorax laterally constricted, rounded in front. Four irregular rows of small pores or setæ on abdomen, with a group of three pores concentrated cephalically and laterally on each side of vasiform orifice. Vasiform orifice cordate, with anterior margin straight; about twice its length from posterior margin. The hair on each side of the orifice about one and one-half the diameter of its base away from the orifice; length of hairs approximately one-quarter the width of orifice. Lingula usually with three lobes on

each side; apparent projection of tip of lingula due to transverse fold caudad of third lobe of lingula. Two rows of teeth found behind the margin. Ten dentations to 0.1 mm. of margin. First row of teeth projecting over syncline of crenulations; second row of teeth over syncline of first row. Marginal fringe of shiny crystalline rods about one-half the width of pupal case. Rods of the marginal fringe thicker and appearing white at 3 points, the first being at central posterior area and the other two located at middle of sides of thorax. Pupal case closely applied to host; dorsum only slightly elevated. Width of pupal case 0.9 mm.; length 1.15 mm.

Adults: Not known.

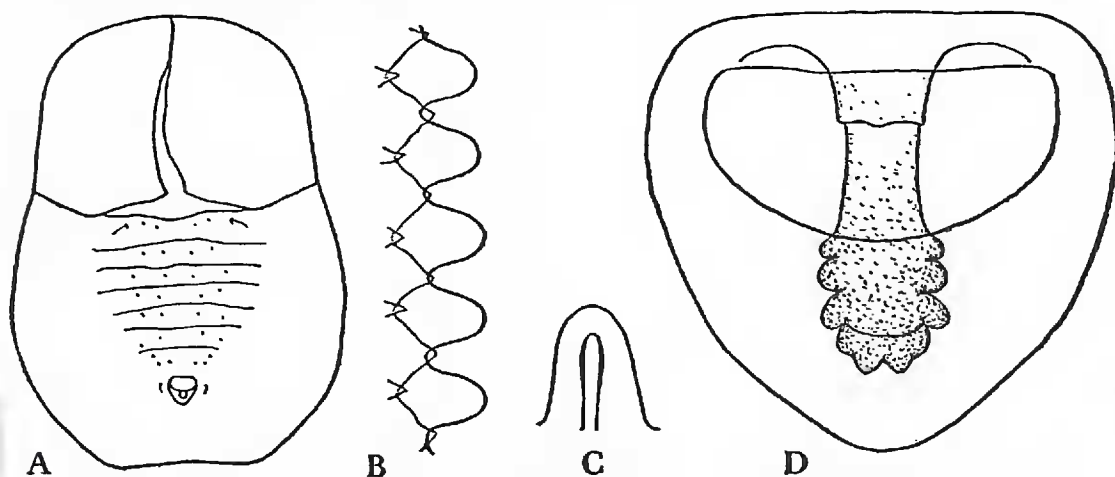


Fig. 1. *Gymnaleurodes bellissima* Sampson and Drews; a. pupal case; b. pupal case margin, 0.5 mm.; c. marginal dentation; d. vasi-form orifice.

Host: *Quercus* sp., from the underside of the leaf.

Holotype, No. 4935, Calif. Acad. Sci., Ent., and nine paratypes mounted in balsam and four natural mounts in the authors' collections taken by E. A. Drews along the highway about one-half mile from the Orange County line in Carbon Canyon, San Bernardino County, California, January 10, 1939.

ANYSTIS AGILIS BANKS, A PREDACIOUS MITE ON EGGS OF THE ARTICHOKE PLUME MOTH

The large reddish mite, *Anystis agilis* Banks, is a common species on the globe artichoke (*Cynara scolymus* L.) in the Half Moon Bay area, where it preys on newly laid eggs of the artichoke plume moth (*Platyptilia carduidactyla* (Riley)), many collembolans, and the artichoke aphid (*Capitophorus braggii* (Gillette)). It is a well known and common predator, but its predacious habits on eggs of the plume moth were considered of unusual interest. I am indebted to Dr. H. E. Ewing for the determination of the mite.—W. H. Lange, Jr.